#### UNITED STATES PATENT AND TRADEMARK OFFICE

#### **CERTIFICATE OF CORRECTION**

PATENT NO. : 7,037,662 B1 Page 1 of 8

APPLICATION NO.: 09/104340
DATED: May 2, 2006
INVENTOR(S): Boyd et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At the First page, column 2 (Abstract), line 4, please delete "gone" and insert --gene-- therefor.

At column 1, line 24, please delete "Neumbiol" and insert -- Neurobiol-- therefor.

At column 1, line 26, please delete " $(TOF-\beta)$ " and insert -- $(TGF-\beta)$ -- therefor.

At column 1, line 41 (approx.), please delete "simulation" and insert --stimulation-- therefor.

At column 1, line 54, please delete "Bemstein" and insert --Bernstein-- therefor.

At column 1, line 57, please delete "348:" and insert --348;-- therefor.

At column 1, line 58, please delete "A." and insert --A.,-- therefor.

At column 2, line 1, please delete "Chang" and insert -- Cheng-- therefor.

At column 2, line 2, please delete "et al." and insert --et al.,-- therefor.

At column 2, line 8, please delete "(Hiral" and insert --(Hirai-- therefor.

At column 2, line 10, please delete "7:" and insert --7;-- therefor.

At column 2, line 14 (approx.), please delete "et at.," and insert --et al.,-- therefor.

At column 2, line 34 (approx.), please delete "at al.," and insert --et al.,-- therefor.

At column 2, line 36 (approx.), please delete "(LERKS:" and insert --(LERKS;-- therefor.

At column 2, line 36 (approx.), please delete "et at.," and insert --et al.,-- therefor.

At column 2, line 43, please delete "et al. 1994:" and insert --et al., 1994;-- therefor.

At column 2, line 45 (approx.), please delete "Brambilia" and insert -- Brambilla -- therefor.

At column 2, line 55, please delete "ill" and insert --III-- therefor.

At column 2, line 56, please delete "et at.," and insert --et al.,-- therefor.

At column 2, line 59, please delete "crossreactivity" and insert --cross-reactivity-- therefor.

At column 2, line 64, please delete "et al." and insert --et al.,-- therefor.

Signed and Sealed this

Thirtieth Day of November, 2010

David J. Kappos Director of the United States Patent and Trademark Office

land J. Kappas

At column 2, line 65, please delete "et oh," and insert --et al.,-- therefor.

At column 2, line 66, please delete "St al.," and insert --et al.,-- therefor.

At column 3, line 14, please delete "et at.," and insert --et al.,-- therefor.

At column 3, line 18-19, please delete "retinoteotal" and insert --retinotectal-- therefor.

At column 3, line 20, please delete "et at.," and insert --et al.,-- therefor.

At column 3, line 21, please delete "370," and insert --370;-- therefor.

At column 3, line 22, please delete "et at.," and insert --et al.,-- therefor.

At column 3, line 23 (approx.), please delete "OBJET" and insert --OBJECT-- therefor.

At column 3, line 32 (approx.), please delete "high affinity" and insert --high-affinity-- therefor.

At column 3, line 45, please delete "Is" and insert --is-- therefor.

At column 3, line 64, please delete "axon I, axon" and insert --exon I, exon-- therefor.

At column 4, line 4, please delete "FIG" and insert --FIG.-- therefor.

At column 4, line 14, please delete "adds" and insert --acids-- therefor.

At column 4, line 17, after "NO:4)" delete ",".

At column 4, line 26, please delete "axon" and insert --exon-- therefor.

At column 4, line 50, please delete "se" and insert --as-- therefor.

At column 5, line 42, please delete "described," and insert --described-- therefor.

At column 5, line 49, please delete "20" and insert --20°-- therefor.

At column 5, line 50, please delete "25" and insert --25°-- therefor.

At column 5, line 51, please delete "10' to 15" and insert --10° to 15°-- therefor.

At column 5, line 53, please delete "Is" and insert --is-- therefor.

At column 5, line 64, after "length" insert --.--.

At column 6, line 7 (approx.), please delete "60000" and insert --6000-- therefor.

At column 6, line 30, please delete "et al" and insert --et al.-- therefor.

At column 6, line 31, please delete "CLONING," and insert -- CLONING.-- therefor.

At column 7, line 12 (approx.), please delete "add" and insert --acid-- therefor.

At column 7, line 49, please delete "calls" and insert --cells-- therefor.

At column 7, line 49, please delete "coils" and insert --cells-- therefor.

At column 8, line 11 (approx.), please delete "es" and insert --as-- therefor.

At column 8, line 16, please delete "end" and insert --and-- therefor.

At column 8, line 33 (approx.), please delete "subsequences" and insert --sub-sequences-- therefor.

At column 8, line 43-44, please delete "Collgan" and insert -- Coligan-- therefor.

At column 9, line 65, please delete "defect," and insert --defects,-- therefor.

At column 10, line 8, please delete "form" and insert --from-- therefor.

At column 10, line 30, please delete "according," and insert --according-- therefor.

At column 10, line 48 (approx.), please delete "NOS" and insert --NOS:-- therefor.

At column 10, line 49 (approx.), please delete "NOS" and insert --NOS:-- therefor.

At column 10, line 50 (approx.), please delete "NOS" and insert --NOS:-- therefor.

At column 10, line 50 (approx.), after "amino" please insert --acid--.

At column 10, line 51 (approx.), please delete "NO" and insert --NO:-- therefor.

At column 10, line 57 (approx.), please delete "2B." and insert --2B:-- therefor.

At column 10, line 64, please delete "Saijadi" and insert -- Saijadi-- therefor.

At column 11, line 9 (approx.), please delete "2E;" and insert --2E:-- therefor.

At column 11, line 27 (approx.), Delete "hydrophoblo" and insert --hydrophobic-- therefor.

At column 11, line 34 (approx.), Delete "tall" and insert --tail-- therefor.

At column 12, line 5, Delete "(1)" and insert --(I)-- therefor.

At column 12, line 8, Delete "7" and insert --7:-- therefor.

At column 12, line 23, Delete "199," and insert --1992,-- therefor.

At column 12, line 24, Delete "Leokmann" and insert -- Lackmann-- therefor.

At column 12, line 28 (approx.), After "Batches" insert -- of--.

At column 12, line 46 (approx.), Delete "Hek" and insert --HEK-- therefor.

At column 12, line 56, Delete "end" and insert --and-- therefor.

At column 12, line 61, Delete "blosensor" and insert --biosensor-- therefor.

At column 13, line 16, Delete "et at.," and insert --et al.,-- therefor.

At column 13, line 30, Delete "libary" and insert --library-- therefor.

At column 13, line 41, Delete "end" and insert --and-- therefor.

At column 13, line 44, Delete "C(bases" and insert -- C (bases-- therefor.

At column 13, line 48, Delete "GTAGTCTAGACAAGCTTGTCGACCAGGTT"

and insert --GTAGTCTAGACAAGCTTGTCGACCAGGTTT-- therefor.

At column 13, line 55, Delete "(Saijadi" and insert -- (Sajjadi-- therefor.

At column 13, line 59, After "and" insert  $-\lambda$ --.

At column 13, line 60, Delete "Elize" and insert -- Eliza-- therefor.

At column 13, line 64, Delete "In" and insert --in-- therefor.

At column 14, line 2, Delete "88°" and insert --68°-- therefor.

At column 14, line 12, Delete "Biosysterris," and insert -- Biosystems, -- therefor.

At column 14, line 20, Delete "17)," and insert --17)-- therefor.

At column 14, line 21, Delete "11)." and insert --18).-- therefor.

At column 14, line 28, Delete "Aced." and insert -- Acad. -- therefor.

At column 14, line 31, Delete "N terminal" and insert --N-terminal-- therefor.

At column 14, line 41, Delete "IV-VI," and insert --IV-VII,-- therefor.

At column 14, line 47, Delete "223)" and insert --23).-- therefor.

At column 14, line 62, After "(>95%" delete "a".

At column 15, line 1, Delete "add" and insert --acid-- therefor.

At column 15, line 4, Delete "1995," and insert -- 1996,-- therefor.

At column 15, line 5, After "expression" insert --constructs--.

At column 15, line 7, Delete "(GTAGTCTAGACAGGACCCGGGCTCAAGGC)" and

insert --(GTAGTCTAGACAGGACCCGGGCTCCAAGGC)-- therefor.

At column 15, line 14, Delete "Mannhelm)." and insert -- Mannheim). -- therefor.

At column 15, line 17, Delete "Bt" and insert --et-- therefor.

At column 15, line 28 (approx.), Delete "(BloRad)," and insert --(BioRad),-- therefor.

At column 15, line 38 (approx.), Delete "ant-mouse" and insert --anti-mouse-- therefor.

At column 15, line 46, Delete "6." and insert --5.-- therefor.

At column 15, line 52 (approx.), Delete "Triis." and insert -- Tris, -- therefor.

At column 15, line 54-55 (approx.), Delete "12,10/30," and insert --12, 10/30,-- therefor.

At column 15, line 56 (approx.), Delete "protein" and insert --proteins-- therefor.

At column 15, line 57 (approx.), Delete "HPLC." and insert --HPLC,-- therefor.

At column 15, line 59 (approx.), Delete "et at.," and insert --et al.,-- therefor.

At column 15, line 64, Delete "61" and insert --51-- therefor.

At column 16, line 10, Delete "et al," and insert --et al.,-- therefor.

At column 16, line 13-14, Delete ") carbodiimide" and insert --)-carbodiimide-- therefor.

At column 16, line 21, Delete "Pharamacia" and insert -- Pharmacia-- therefor.

At column 16, line 22, Delete "Blosensor" and insert -- Biosensor-- therefor.

At column 16, line 66 (approx.), Delete "word et at.," and insert -- Ward et al., -- therefor.

At column 17, line 5 (approx.), Delete "oh" and insert --on-- therefor.

At column 17, line 30 (approx.), Delete "CDNA" and insert --cDNA-- therefor.

At column 17, line 32 (approx.), Delete "aliquot." and insert --aliquots.-- therefor.

At column 17, line 57, Delete "Plue" and insert -- Plus-- therefor.

At column 18, line 19 (approx.), Delete "intro-exon" and insert --intron-exon-- therefor.

At column 18, line 29, Delete "(Wioks" and insert --(Wicks-- therefor.

At column 18, line 36 (approx.), Delete "(Saijadi" and insert --(Sajjadi -- therefor.

At column 18, line 37 (approx.), Delete "Maisonplerre" and insert -- Maisonpierre-- therefor.

At column 18, line 37 (approx.), Delete "Oncogen" and insert -- Oncogene-- therefor.

At column 18, line 38 (approx.), Delete "axon" and insert --exon-- therefor.

At column 18, line 63, Delete "axon," and insert --exon,-- therefor.

At column 18, line 66, Delete "of al.," and insert --et al.,-- therefor.

At column 18, line 67, Delete "1988," and insert -- 1986,-- therefor.

At column 19, line 10 (approx.), Delete "216:" and insert --216;-- therefor.

At column 19, line 17 (approx.), Delete "(Maisonplerre" and insert -- (Maisonpierre-- therefor.

At column 19, line 33 (approx.), Delete "Identify" and insert --identify-- therefor.

At column 19, line 40 (approx.), Delete "Cys<sub>n</sub>" and insert --Cys<sub>71</sub>-- therefor.

At column 19, line 59 (approx.), Delete "kD)." and insert --kD),-- therefor.

At column 20, line 18, Delete "supra:" and insert --supra; -- therefor.

At column 20, line 18, Delete "et at.," and insert --et al.,-- therefor.

At column 20, line 27 (approx.), Delete " $\mu$ g/ $\mathbf{n}$ " and insert -- $\mu$ g/ $\mathbf{m}$ l-- therefor.

At column 20, line 66, Delete "k<sub>2</sub>" and insert --k<sub>a</sub>-- therefor.

At column 20, line 67, Delete " $k_2$ " and insert -- $k_a$ -- therefor.

At column 21. line 1, Delete "Apparant" and insert -- Apparent-- therefor.

At column 21, line 9 (approx.), Delete "et at," and insert --et al.,-- therefor.

At column 21, line 11 (approx.), Delete "Interaction" and insert --interaction--.

At column 21, line 16 (approx.), Delete "Immobilised" and insert --immobilised-- therefor.

At column 21, line 31, Delete "BB," and insert -- 6B,-- therefor.

At column 21, line 53, Delete "8D)" and insert --6D)-- therefor.

At column 21, line 56, Delete "crosslinked" and insert --cross-linked-- therefor.

At column 22, line 3, Delete "et al." and insert --et al.,-- therefor.

At column 22, line 12 (approx.), Delete "3FLAG" and insert --3-FLAG-- therefor.

At column 22, line 26 (approx.), Delete "Indirect" and insert --indirect-- therefor.

At column 22, line 31 (approx.), Delete "199," and insert --1994,-- therefor.

At column 23, line 6, Delete "I–II" and insert --I–III-- therefor.

At column 23, line 7, Delete "dos-dependent" and insert --dose-dependent-- therefor.

At column 23, line 21, Delete "Flanagan." and insert --Flanagan,-- therefor.

At column 23, line 28 (approx.), Delete "1995," and insert --1995,-- therefor.

At column 23, line 28 (approx.), After "Xu" delete "of".

At column 23, line 44, Delete "In" and insert --in-- therefor.

At column 23, line 50 (approx.), Delete "(FIG. 7)" and insert -- (as hereinbefore described)-- therefor.

At column 23, line 62-63, Delete "(Saijadi et ea.," and insert --(Sajjadi et al.,-- therefor.

At column 24, line 3, Delete "(FIG. 10D)." and insert --.-- therefor.

At column 24, line 5, Delete "(FIG. 10A)," and insert --(FIG. 7),-- therefor.

At column 24, line 19, Delete "diorganised" and insert --disorganised-- therefor.

At column 24, line 19, Delete "(FIGS. 8A-F)." and insert --.-- therefor.

At column 24, line 20-21, After "12 hpf" delete "(FIGS. 8B and 8E)".

At column 24, line 29 (approx.), Delete "seamentation" and insert --segmentation-- therefor.

At column 24, line 29-30 (approx.), Delete "(FIGS. 8B, 8E, 8C, 8F)." and insert --.-- therefor.

At column 24, line 40 (approx.), Delete "defeots," and insert --defects,-- therefor.

At column 24, line 46 (approx.), Delete "(Kraus," and insert --(Krauss,-- therefor.

At column 24, line 50, Delete "(FIG. 11)." and insert --(FIG. 8).-- therefor.

At column 24, line 52, Delete "FIGS. 9A, 9B) presented above." and insert --.-- therefor.

At column 24, line 54 (approx.), Delete "(FIGS. 9C-F)." and insert --.-- therefor.

At column 24, line 60 (approx.), After "injected with" delete "with".

At column 24, line 61 (approx.), Delete "(FIGS. 9A, 9B)." and insert --.-- therefor.

At column 24, line 66-67, delete "conforms (FIGS. 9D, 9F)" and insert --confirms-- therefor.

At column 25, line 8, Delete "speciffic" and insert --specific-- therefor.

At column 25, line 14, Delete "In" and insert --in-- therefor.

At column 25, line 22 (approx.), Delete "high affinity" and insert --high-affinity-- therefor.

At column 25, line 25 (approx.), Delete "extodomain" and insert --exodomain-- therefor.

At column 25, line 26-27 (approx.), Delete "high affinity" and insert --high-affinity-- therefor.

At column 25, line 40, Delete "(FIG. 10C)," and insert --,-- therefor.

At column 25 line 40-41, Delete "(FIG. 10G)." and insert --.-- therefor.

At column 25, line 41, After "expression" delete "(FIG. 10D)".

At column 25, line 43, Delete "(FIG. 10A)" and insert --(FIG. 7)-- therefor.

At column 25, line 48 (approx.), Delete "ligands," and insert --ligands-- therefor.

At column 25, line 65, Delete "LERK" and insert -- LERKs-- therefor.

At column 26, line 4, Delete "9L," and insert --al.,-- therefor.

At column 26, line 7, Delete "receptively)," and insert --respectively),-- therefor.

At column 26, line 13 (approx.), Delete "1996," and insert --1995,-- therefor.

At column 26, line 33 (approx.), Delete "et al," and insert --et al.,-- therefor.

At column 26, line 35 (approx.), After solution delete "(FIG. 7)".

At column 26, line 38 (approx.), Delete "1998)" and insert --1996)-- therefor.

At column 26, line 47, Delete "LERK-Fe/HEK" and insert -- LERK-Fc/HEK-- therefor.

At column 26, line 57 (approx.), Delete "dimerio" and insert --dimeric-- therefor.

At column 26, line 60, Delete "Interactions," and insert --interactions,-- therefor.

At column 26, line 63, Delete "et el.," and insert --et al.,-- therefor.

At column 26, line 65, Delete "receptor ligand" and insert --receptor-ligand-- therefor.

At column 26, line 67, Delete "some" and insert --same-- therefor.

At column 27, line 1, Delete "(Gals" and insert --(Gale-- therefor.

At column 27, line 10 (approx.), Delete "at al.," and insert --et al.,-- therefor.

At column 27, line 40 (approx.), Delete "experiments" and insert --experiments,-- therefor.

At column 27, line 44, Before "and" delete "(FIG.7)".

At column 27, line 45, Delete "al. 1996," and insert --al., 1995,-- therefor.

At column 27, line 51, Delete "LERK3"" and insert -- LERK3-- therefor.

At column 27, line 65, After "LERK" insert --7-- therefor.

At column 28, line 6, Delete "arid" and insert --acid-- therefor.

At column 28, line 7, Delete "is" and insert --its-- therefor.

At column 28, line 9, Delete "identityin" and insert --identity in-- therefor.

At column 28, line 10, Delete "(99.6%" and insert -- (99.5%-- therefor.

At column 28, line 10, Delete "respectively," and insert --respectively;-- therefor.

At column 28, line 17, Delete "neccessary" and insert --necessary-- therefor.

At column 28, line 26, Delete "suppports" and insert -- supports-- therefor.

At column 28, line 28, Delete "at" and insert --acts-- therefor.

At column 28, line 31 (approx.), Delete "signalling" and insert --signaling-- therefor.

At column 28, line 33 (approx.), Delete "be Spirtz" and insert --b, Spritz-- therefor.

At column 28, line 34 (approx.), Delete "at ea.," and insert --et al.,-- therefor.

At column 28, line 41 (approx.), Delete "ligaind" and insert --ligand-- therefor.

At column 28, line 42, Delete "et at," and insert --et al.,-- therefor.

At column 28, line 46, Delete "et at.," and insert --et al.,-- therefor.

At column 28, line 53 (approx.), Delete "tiltrating" and insert --titrating-- therefor.

At column 28, line 57, Delete "receptor ligands" and insert --receptor-ligands-- therefor.

At column 28, line 59, Delete "1998," and insert --1996,-- therefor.